

EBS Report Card

- **A strong la Niña** has formed on the equator as reflected in the recent **downward trend in NPI**. The prediction for the Bering Sea is **above average sea-ice extent** and duration in winter and spring 2011. This would result in a **fifth year of extensive ice** over the southern Bering Sea shelf.
- The euphausiid biomass index increased more than three fold from 2004 to 2009 and then decreased in 2010 by ca. 30%. Large copepod biomass increased 10 fold from very low values during the recent 2002-2005 warm period to 2009. This suggests that **overall food availability for planktivorous species is high**. Age-0 pollock and other planktivorous species may be dependent on the availability of sufficient prey to generate enough depot lipids to survive their first winter. Thus, **we predict that the survival of this particular year class of fishes might be better than average**.
- Current (2005-2010) mean biomass, catch, and exploitation rates of motile benthic epifauna and benthic foraging fish have been within \pm one standard deviation of 1977-2010 levels. **No trend is apparent in recent years for these foraging guilds**.
- There is a **concern with two of the commercial crab stocks** in the mobile benthic epifauna guild which are overfished. However, this guild appears stable because the guild is dominated by non-target fish and invertebrate biomass.
- There are **no apparent trends in benthic forager catch and exploitation rate**. The benthic foragers guild appears stable and **may not require further management action**.
- Pelagic foragers have biomass below mean and exploitation rate above mean, but increasing trends in biomass and decreasing trends in catch and exploitation rates. The **pelagic foragers guild biomass has been at a historic low**, which has been a recent management concern. However, there are signs of recovery within the guild, as well as increased forage and positive physical conditions to support recovery. Continued caution with the management of species in this guild and continued monitoring may be necessary, **but the outlook is improved from last year**.
- The **recent increasing trend in the apex predator guild biomass** is driven largely by a decrease in Pacific cod biomass being offset by an increase in arrowtooth flounder biomass. The fish apex predators guild appears stable and **may not require additional management action**.
- Thick-billed murre reproductive success has increased during the past five years, concurrent with a colder Bering Sea, later ice retreat, and increased biomass of zooplankton on the outer shelf. Continued cold conditions in the Bering Sea will likely lead to **favorable conditions for thick-billed murre**s nesting on St. George Island and a continued trend of higher reproductive success in 2011.
- Northern fur seal pup production on St Paul Island has been declining since the mid-1990s, while it has been relatively stable on St George since 2002. Estimated pup production on both Pribilof Islands in 2008 was similar to the level observed in 1916; however the population trends are different. In 1916, the northern fur seal population was increasing at approximately 8% per year following the cessation of extensive pelagic sealing, while currently (1998 through 2008), **northern fur seal pup production on both Pribilof Islands is decreasing** at approximately 6% per year.

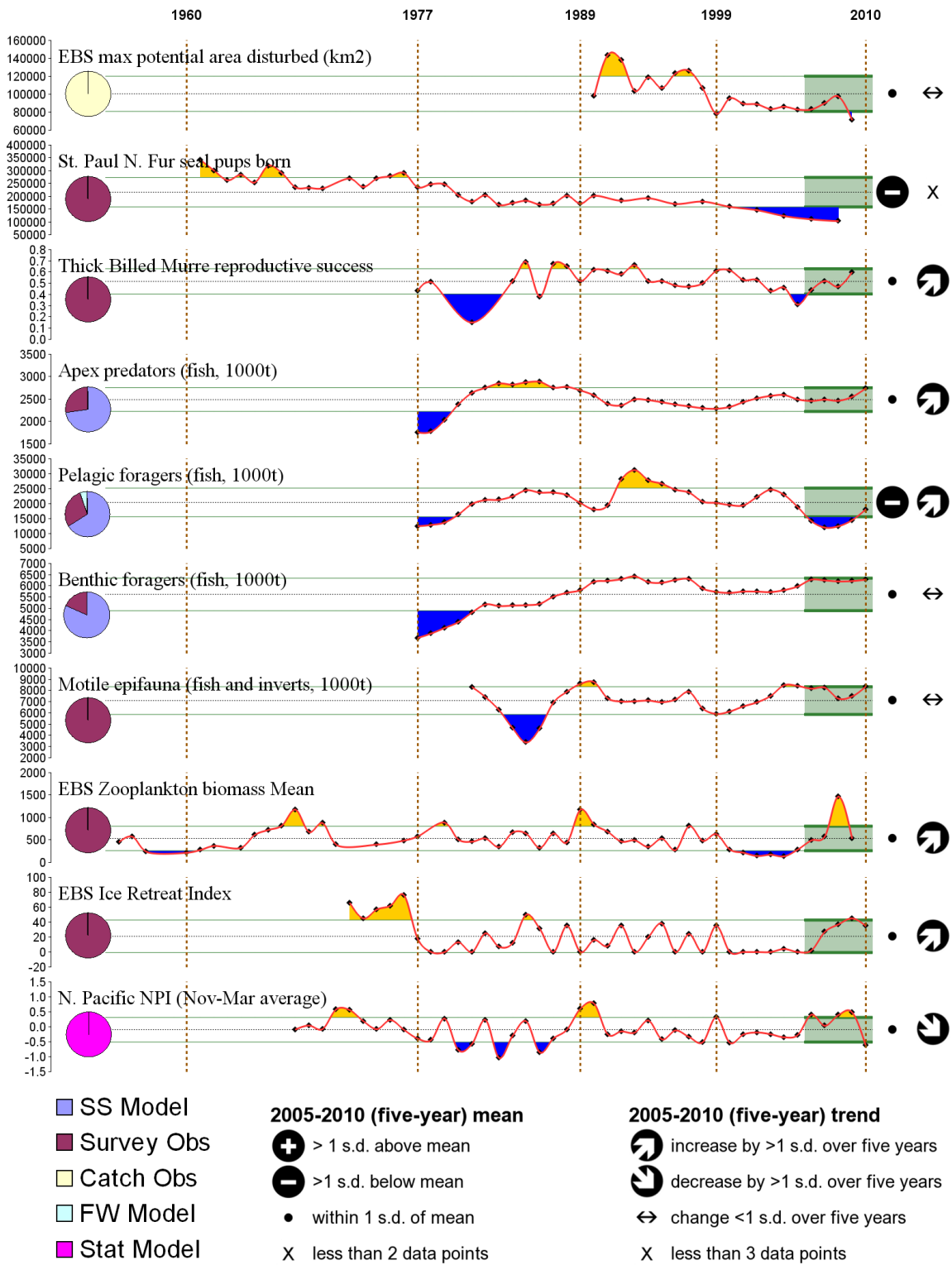


Figure 1: Eastern Bering Sea ecosystem assessment indicators; see text for descriptions.